C.2 SOIL DATA

C.2.1 Silty Loam Soil Properties

Saturated Hydraulic Conductivity = 5 X 10^{-4} cm/s
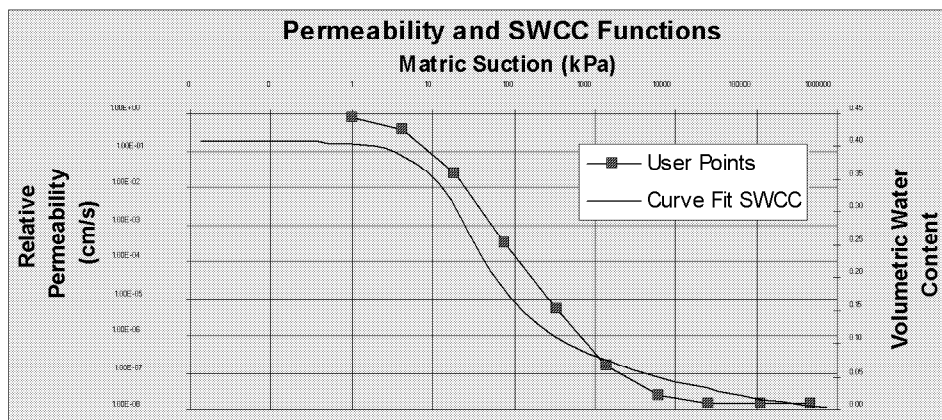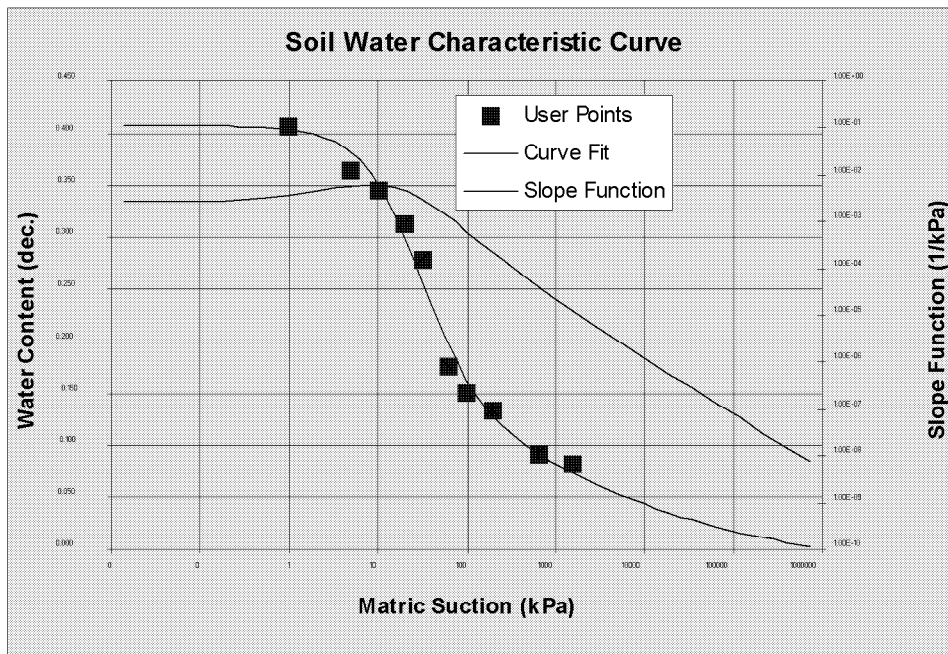
Porosity = 44.1%

Curve Fit Parameters (Fredlund and Xing)

a = 15.84

n = 1.41

m = 0.88

Soil Water Characteristic Curve

Permeability and SWCC Functions

C.2.2   Silty Loam Water Storage Capacity

$$StorageCapacity = (Porosity - Residual)SoilThickness$$
$$StorageCapacity = (0.441 - 0.083)2m$$
$$StorageCapacity = 0.716m$$

C.2.3 Fine Sand Soil Properties

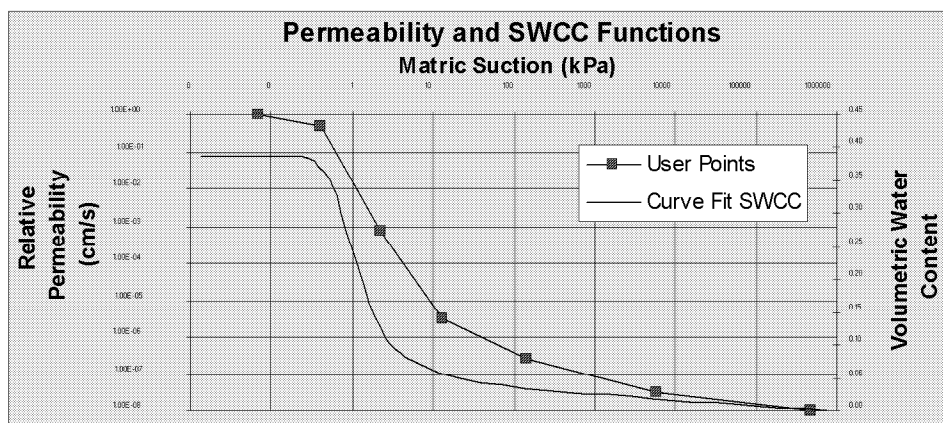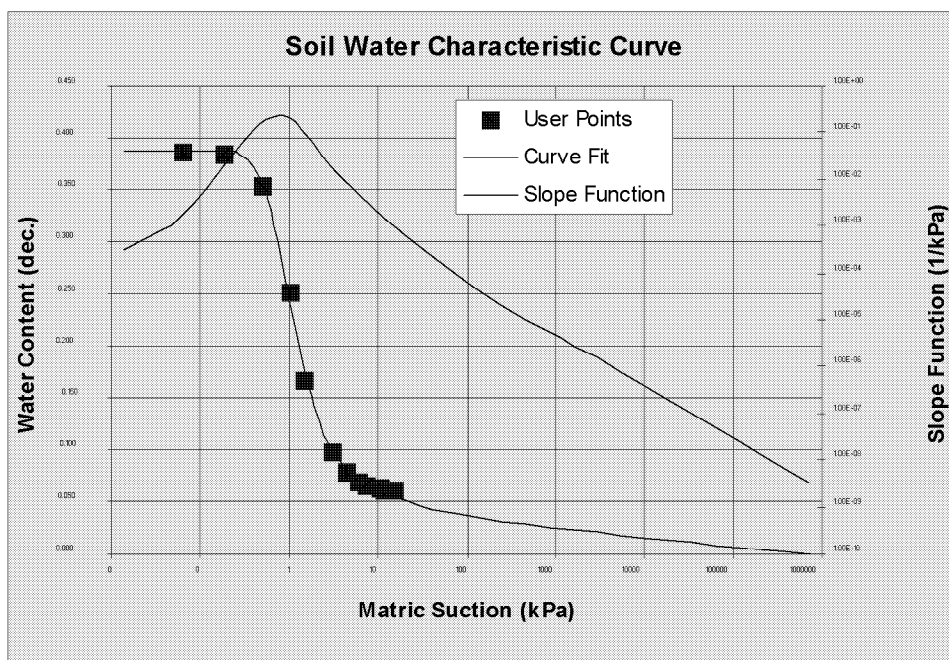Saturated Hydraulic Conductivity = 1 X 10^{-3} cm/s

Porosity = 38.7%

Curve Fit Parameters (Fredlund and Xing)

    a = 1.73

    n = 3.45

    m = 0.84

Soil Water Characteristic Curve

Permeability and SWCC Functions

C.2.4 Coarse Sand Soil Properties

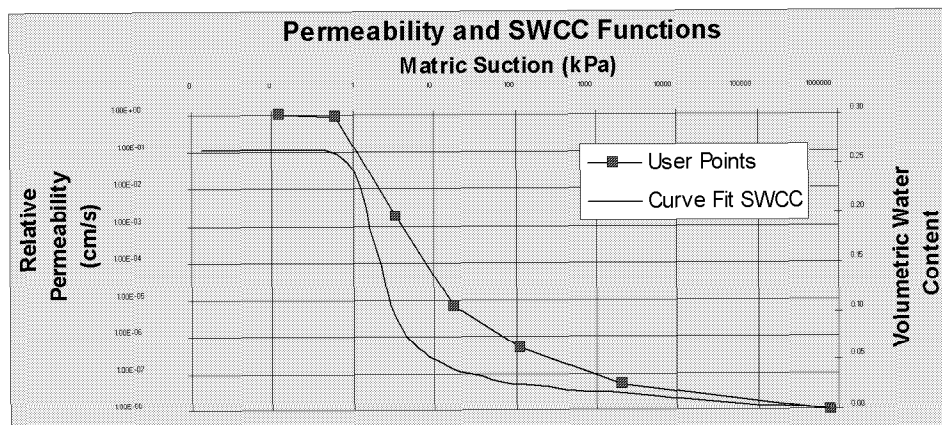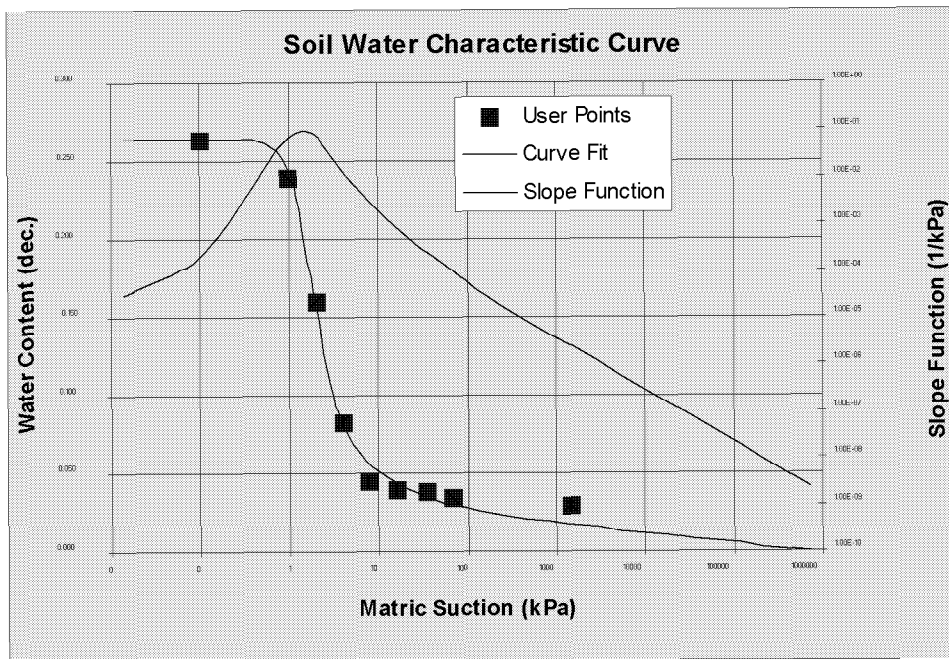Saturated Hydraulic Conductivity = 1×10^{-2} cm/s

Porosity = 26.5%

Curve Fit Parameters (Fredlund and Xing)

    a = 1.36

    n = 3.88

    m = 0.80

C.2.5 Cobble Soil Properties

Saturated Hydraulic Conductivity = 1×10^{-1} cm/s

Porosity = 26.5%

Curve Fit Parameters (Fredlund and Xing)

    a = 0.17

    n = 4.06

    m = 1.35